

CLAIMS

1. A fan (1) comprising:

a centrifugal fan (3) including an impeller (31a to 31d) and a scroll casing (32a to 32d) that has a scroll intake port (34a to 34d) and houses the impeller; and

a unit casing (2) having an unit intake port (2a) that opens in a direction crossing an opening direction of the scroll intake port, and configured to house the centrifugal fan,

wherein

the scroll casing has, at a circumference of the scroll intake port, a bulged portion (61a to 61d) whose inner surface is formed evenly in a circumferential direction and whose outer surface portion far from the unit intake port is formed such that it bulges out to a side opposite the impeller.

2. The fan (1) according to claim 1, wherein

the bulged portion (61a to 61d) is formed unevenly such that a bulging distance (L) increases from a portion near the unit intake port (2a) to a portion far therefrom toward the side opposite the impeller.

3. The fan according to claim 1 or 2, wherein

the scroll casing (32a to 32d) has, at the circumferential portion of the scroll intake port (34a to 34d), a plurality of ribs (62a to 62d, 63a to 63d) protruding to the side opposite the impeller, and

the bulged portion (61a to 61d) has an outer surface that is formed by a surface that imaginary connects the plurality of ribs at their ends on the side opposite the impeller.

4. An air conditioner (1) comprising:

a centrifugal fan (3) including an impeller (31a to 31d) and a scroll casing (32a to 32d) that has a scroll intake port (34a to 34d) and a scroll discharge port (35a to 35d) and houses the impeller;

a unit casing (2) including a unit intake port (2a) that opens in a direction crossing an opening direction of the scroll intake port and a unit discharge port (2b), and configured to house the centrifugal fan;

a partition member (24) serving as a member for dividing a space inside the unit casing into a fan chamber (S1) in communication with the unit intake port and a heat exchanger chamber (S2) in communication with the unit discharge port, and including a communication hole (25a to 25d) formed so as to communicate the fan chamber and the heat exchanger chamber with each other and to correspond to the scroll discharge

port; and

a heat exchanger (4) disposed inside the heat exchanger chamber such that air blown into the heat exchanger chamber from the scroll discharge port passes therethrough and then is blown out from the unit discharge port,

5 wherein,

the scroll casing has, at a circumferential portion of the scroll intake port, a bulged portion (61a to 61d) whose inner surface is formed evenly in a circumferential direction and whose outer surface portion far from the unit intake port is formed such that it bulges out to a side opposite the impeller side.